

Title (en)

COHERENT LASER ARRAY CONTROL SYSTEM AND METHOD

Title (de)

KOHÄRENTES LASERARRAYSTEUERSYSTEM UND VERFAHREN

Title (fr)

SYSTÈME DE COMMANDE DE RÉSEAU LASER COHÉRENT ET PROCÉDÉ ASSOCIÉ

Publication

EP 2856585 B1 20190911 (EN)

Application

EP 13793407 A 20130514

Priority

- US 201213479760 A 20120524
- US 2013040947 W 20130514

Abstract (en)

[origin: US2013315271A1] In one embodiment, a system includes a master oscillator for generating a primary laser signal. A plurality of amplifiers amplifies a plurality of secondary laser signals and generates a plurality of amplified laser signals. A plurality of actuators adjusts a position, a beam angle, a path length, and a phase of the plurality of amplified laser signals. At least one control module controls the plurality of actuators that adjust the position, the beam angle, the path length, and the phase of the plurality of amplified laser signals. A combiner receives the amplified laser signals to generate a combined laser output signal. At least one filter samples the combined laser output signal to generate a plurality of phase errors as feedback for the control module to control at least one of the position, the beam angle, or the path length for the plurality of amplified laser signals.

IPC 8 full level

H01S 3/00 (2006.01); **H01S 3/13** (2006.01); **H01S 3/23** (2006.01); **H01S 3/067** (2006.01)

CPC (source: EP US)

H01S 3/1307 (2013.01 - EP US); **H01S 3/2383** (2013.01 - EP US); **H01S 3/06754** (2013.01 - EP US); **H01S 3/1305** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2013315271 A1 20131128; **US 8792526 B2 20140729**; EP 2856585 A2 20150408; EP 2856585 A4 20160615; EP 2856585 B1 20190911; JP 2015521386 A 20150727; JP 2017038094 A 20170216; JP 6314202 B2 20180418; WO 2013176927 A2 20131128; WO 2013176927 A3 20150521

DOCDB simple family (application)

US 201213479760 A 20120524; EP 13793407 A 20130514; JP 2015514054 A 20130514; JP 2016226691 A 20161122; US 2013040947 W 20130514